



National Assessment Methods Working Group Charter

Mission

- Foster development, testing and maintenance of high quality assessment methods
- Provide tested, well-documented models that efficiently incorporate all available data and provide well-understood and accurate assessments.

Scope

- Breadth
 - Fish stock assessment methods - PRIMARY
 - Ecosystem
 - Protected resources
- Depth
 - Tools and data processing
 - Population models
 - Management technical advice
- Training and education:
 - Training for NMFS staff
 - Workshops for capacity building and communication

Project Areas

- **Toolbox Project**

The NOAA Fisheries Toolbox is a collection of computer programs which can be used in fishery stock assessments. These programs are web-accessible at www.nft.nefsc.noaa.gov. Many of the models and analytical tools are used in peer-reviewed stock assessments in the U.S. and

internationally. Each program is a stand-alone application which combines a sophisticated graphical interface with an independent calculation engine. The PopSim module can generate test datasets with which to study the performance of the other Toolbox modules. The Toolbox programs require the Windows operating system. The Toolbox's principal programmer is located at the Northeast Fisheries Science Center, but the project draws on expertise of scientists throughout NMFS to create the calculation engines. The AMWG serves as a steering committee for the Toolbox, providing overarching guidance for the development of the project.

- **ADMB software support**

The AMWG provides support to this activity in a number of ways. First, a significant contribution is provided to the ADMB project directly which covers the cost (including overhead) of a full time IT person and part time administrative and oversight activities. Specific tasks have been specified and funded as needed. A second way NMFS and the AMWG supports ADMB activities is through contributing to annual developers meeting and through training in the use of ADMB as relates to fisheries stock assessment directly. Finally, the AMWG has established an FTE at the SEFSC to serve as lead programmer and liaison between ADMB and assessment scientists and developers.

- **Workshops and training**

This activity will be coordinated with NSAW group and will pursue specific topics designed to improve the quality of stock assessments nationwide. For example, funds from AMWG were used to hold a workshop on best-practices for natural mortality in stock assessments and this culminated in peer-reviewed technical memorandum. The consortium established with AMWG seed funding called “CAPAM” (Center for Advanced Population and Assessment Modeling) also fills this role.

- **Internal RFP**

The Assessment Methods Working Group annually solicits projects to improve stock assessment analytical methods. Its goal is to support development, testing, standardization, and documentation of techniques used in statistical analysis and modeling for stock assessments. Projects are not focused on assessment of a particular species, nor to conduct field studies to fill data gaps. Some examples of suitable project themes include: workshops and investigations to develop best practices for addressing specific topics in stock assessments, development of new software, testing performance of assessment methods, documentation and graphical interfaces for assessment methods. Approximately \$400K is awarded each year.

- **Methods Projects (Improve, Test, Document)**

Methods projects are an important focus of the WG. Total quality management for fish stock assessments includes improving, testing, and documenting technical methods and computational tools. These considerations also apply to the development of ecosystem and protected species assessment approaches. Improvements in existing stock assessment methods and new approaches are continually being developed. Ideally, new methods should be incorporated into best available

practices as soon as practicable but this requires a quality control and quality assurance testing. Testing assessment methods is essential for quality assurance of stock assessments and the derived management advice. Computer simulation provides a key tool to test assessment methods and guarantee satisfactory performance. Full documentation of assessment methods is important for maintaining quality assurance and transparency. The cycle of developing improved methods, testing their performance, and documenting their features and function is an ongoing process for total quality management of fish stock assessment methods used by NOAA Fisheries.

Membership

- One per Science Center, S&T, plus at-large members by invitation
- Project staff as affiliate members
- Chair of WG selected by WG members

Meetings

- The WG shall meet at least once per year
- In lieu of funds being unavailable, bimonthly (or monthly) conference calls will serve to apprise members of activities and directions forward

Annual report

An annual report will be prepared describing a summary of working group activities. This report should be provided to the Science Board.